

Sheep anti-human Fibrinogen (Fg)

Affinity-Purified IgG

0.5 mg

Product #: SAFG-AP

Lot #: XXXX

Expiry date: XXXX

Store at -10 to -20°C

1395 Sandhill Drive. Ancaster, Ontario, Canada L9G 4V5
905-304-9896 • 800-903-6020 • fax 905-304-9897

For Research Use Only.

Not for use in diagnostic procedures.

Description of Fibrinogen (Fg)

Fibrinogen is an abundant plasma protein (5-10 µM) produced in the liver. The intact protein has a molecular weight of 340 kDa and is composed of 3 pairs of disulphide-bound polypeptide chains named α , β and γ . Fibrinogen is a triglobular protein consisting of a central E domain and terminal D domains. Proteolysis by thrombin results in release of Fibrinopeptide A (FPA, α 1-16) followed by Fibrinopeptide B (FPB, β 1-14) and the fibrin monomers that result polymerize in a half-overlap fashion to form insoluble fibrin fibrils. The chains of fibrin are referred to as α , β and γ , due to the removal of FPA and FPB. The polymerised fibrin is subsequently stabilized by the transglutaminase activated Factor XIII that forms amide linkages between γ chains and, to a lesser extent, α chains of the fibrin molecules. Proteolysis of fibrinogen by plasmin initially liberates C-terminal residues from the α chain to produce fragment X (intact D-E-D, which is still clottable). Fragment X is further degraded to non-clottable fragments Y (D-E) and D. Fragment Y can be digested into its constituent D and E fragments. Digestion of non-crosslinked fibrin with plasmin is very similar to the digestion of fibrinogen, which results in production of fragments D and E. Degradation of crosslinked fibrin by plasmin results in fragment DD (D-Dimer consisting of the D domains of 2 fibrin molecules crosslinked via the γ chains), fragment E (central E domain) as well as DDE in which fragment E is non-covalently associated with DD. For human crosslinked fibrin, the relative weights of the cleavage fragments produced are: 184 kDa for fragment DD, 92 kDa for D, 50 kDa for E, 1.54 kDa for FPA and 1.57 kDa for FPB¹⁻³.

REFERENCES and REVIEWS

- Hantgan RR, Francis CW, Marder VJ; Fibrinogen Structure and Physiology; in Hemostasis and Thrombosis, 3rd Edition, eds. RW Colman, J Hirsh, VJ Marder and EW Salzman, pp 277-300, J.B. Lippincott Co., Philadelphia PA, USA, 1994.
- Shafer JA, Higgins DL; Human Fibrinogen; CRC Critical Reviews in Clinical Laboratory Sciences 26, pp 1-41, 1988.
- Binnie CG, Lord ST; The Fibrinogen Sequences that Interact with Thrombin; Blood 81, pp 3186-3192, 1993.

Product Specifications

Description:

Vial containing XXXX ml of IgG purified by affinity-chromatography on immobilized Fg. Total protein is 0.5 mg.

Format:

Affinity-purified IgG (APIgG), clear liquid.

Host Animal:

Sheep

Immunogen:

Human fibrinogen purified from plasma.

Concentration:

IgG concentration is XXXX mg/ml, determined by absorbance using an extinction coefficient ($E_{1\%}^{1\text{cm}}$) of 13.4.

Buffer:

10 mM HEPES, pH 7.4, 150 mM NaCl, 50% (v/v) glycerol.

Storage:

Store between -10 and -20°C. Product will become viscous but will not freeze. Avoid storage in frost-free freezers. Keep vial tightly capped. Allow product to warm to room temperature and gently mix before use.

Specificity:

This antibody is specific for Fibrinogen as demonstrated by immunoelectrophoresis and ELISA.

Applications:

Suitable as a source of enriched antibodies to fibrinogen.

Neutralizing activity:

Not determined.

Species Cross Reactivity: (immunodiffusion vs. citrated plasma)

Human:	XXXX	Mouse:	XXXX	Rat:	XXXX
Rabbit:	XXXX	Pig:	XXXX	Dog:	XXXX

Related Products:

Cat #: **SAFG-IG** Sheep anti-human Fibrinogen, whole IgG from antiserum
 Cat #: **SAFG-HRP** Sheep anti-human Fibrinogen, peroxidase labelled IgG
 Cat #: **SAFG-APHRP** Sheep anti-human Fibrinogen, peroxidase labelled APIgG
 Cat #: **FG-EIA** Paired antibody set for ELISA of Fibrinogen, 5 x 96 wells
 Cat #: **SARFG-IG** Sheep anti-rabbit Fibrinogen, whole IgG from antiserum
 Cat #: **SARFG-AP** Sheep anti-rabbit Fibrinogen, affinity purified IgG
 Cat #: **SARFG-HRP** Sheep anti-rabbit Fibrinogen, peroxidase labelled IgG
 Cat #: **RBFGE-EIA** Paired antibody set for ELISA of Rabbit Fg, 4 x 96 wells
 Cat #: **SAFNE-IG** Sheep anti-Fibrin Fragment E, whole IgG from antiserum
 Cat #: **SAFNE-HRP** Sheep anti-Fibrin Fragment E, peroxidase labelled IgG
 Cat #: **SAFPA-IG** Sheep anti-Fibrinopeptide A, whole IgG from antiserum
 Cat #: **SAFPA-AP** Sheep anti-Fibrinopeptide A, affinity purified IgG
 Cat #: **SAFPA-HRP** Sheep anti-Fibrinopeptide A, peroxidase labelled IgG

Visit our site (www.affinitybiologicals.com) for details.

Limited Warranty: This product is warranted to perform in accordance with its labeling and literature. Affinity Biologicals Inc. disclaims any implied warranty of merchantability or fitness for any other purposes, and in no event will Affinity Biologicals Inc. be liable for any consequential damages arising out of aforesaid express warranty.

Manufactured in Canada by:
AFFINITY BIOLOGICALS INC.
 1395 Sandhill Drive
 Ancaster ON CANADA L9G 4V5
 Tel: (905) 304-9896
 (800) 903-6020
 Fax: (905) 304-9897
info@affinitybiologicals.com